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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,250	06/20/2003	Hamid G. Kia	H-205868	6691

7590 09/08/2006

General Motors Corporation - Legal Staff
Kathryn A. Marra
Mail Code 482-C23-B21
P.O. Box 300
Detroit, MI 48265-3000

EXAMINER

DIXON, MERRICK L

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/601,250

Applicant(s)

KIA ET AL.

Examiner

Merrick Dixon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on decision 6-22-06.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 16-29 and 36-39 is/are allowed.
6) ☒ Claim(s) 1-15 and 35 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

MERRICK DIXON
PRIMARY EXAMINER

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Claims 16-29; 36-39 are allowed.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okayama et al(JP-150559) in view of Andersen et al(US 5830548).

The cited primary reference teaches the claimed process including applying a gel coat onto a mold, applying a barrier thereon, and applying a laminate over the barrier layer – see Abstract. The primary reference teaches fibers in its respective layers. The secondary reference to Lindberg et al, however, teaches the aspect of such fibers be various types, amounts and dimensions- col 22, lines 4-13; col 20, lines 45-52; col 10, lines 23-39;see entire reference. It would have been obvious to one of ordinary skill in the art at the time the invention is made to combine the teachings of the secondary reference and incorporate fibers of be various types, amounts and dimensions in respective layers of the primary reference , in the absence of unexpected results motivated by the desire to impart desired properties/characteristics to said article of the primary reference – col 11, lines 46-54. It is noted those limitations relating to the process are germane to the instant question for patentability, not those claimed limitations directed to structure limitations. See Ex parte Pfeiffer, 1962 C.D. 408(1961). Accordingly, applicants' limitations directed to weights of the recited material and fillers,

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are of no patentable consequences to the instant question for patentability which must be manipulatively distinct. Thus and relating to claims 2-8, the resulting types/products, amounts and dimensions of material used during the claimed process are of no patentable consequences which must be manipulatively distinct for reasons discussed above.

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Claims 30-32, 34, 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Okayama (JP2001-150559) in view of Marker(US 5087405).

The primary reference teaches the claimed process as discussed above, inter alia. The primary reference, however, fails to teach the aspect of hand lay a layer material onto its laminated fiber reinforced product. The secondary reference to Marker, however, teaches that it is known in the art to apply layer material via hand application (brush laying) – col 2, lines 64-65; col 3, lines 3-14. it would have been obvious to one of ordinary skill in the art at the time the invention is made to hand-lay desired layers to laminated fiber reinforced products as taught by the primary reference in the absence of unexpected results motivated by the desire to impart desired and manipulated product properties. Both references are combineable for they teach fiber reinforced laminated articles. Concerning claims 31-32, the secondary reference expressly teaches curing its product – col 2, lines 65-66. concerning claim 34, the primary reference teaches weight amounts for its polyester resin in page 2, lines 94-100. it stands to reason the remaining

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weight percentage for the marble spheres of the secondary reference would naturally amounts to the weight amount claimed(for a 100% composition amount).

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Claims 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maker (US 5087405) and GB Patent(1493547) as applied to claims 30, 31,32,34,35 above, and further in view of Okayama(JP2001-150559). The Okayama reference teaches that it is known in the art to employ dicyclopentadiene polyester resin in fiber reinforced product as taught by the cited references- Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention is made to combine the teachings of Okayama and select known and specific polyester material, as taught by Okayama, in the obvious combined teachings of the references as set forth above motivated by the desire to impart desired characteristics to the respective product. Such selection is believed a mere matter of obvious design choice. In re Leshin 125 USPQ 416.

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Claims 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB Patent (1493547) in view of Maker(US 5087405).

The cited primary UK patent teaches the claimed invention including a laminate composition including an unsaturated polyester resin, initiator material and filler of specific dimensions- page 1, lines 30-36; page 3, lines 72-83. The primary reference

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fails to teach the inclusion of marble-like microspheres in its composition. The secondary reference to Maker, however, teaches that it is known in the instant art to include such marble microsphere particles in fiber reinforced laminate such as taught by the primary reference- col 11, lines 1-15. It would have been obvious to one of ordinary skill in the art at the time the invention is made to combine the teachings of the secondary reference to Maker and provide the primary reference with such marble-like particles to enhance the respective layers' adhesion- col 11, lines 46-49. It is noted that the phrase, "capable of" in line 5 of claim 10, is not a positive limitation and does not constitute a limitation in any patentable sense what so ever- In re Hutchinson, 69 USPQ 138. However, it is submitted that the recited initiator of the primary reference would possess such claimed characteristics/abilities, in the absence of unexpected results. Concerning claim 14, the secondary reference teaches calcium carbonate coating in col 11, line 10-49. concerning claims 11, and 12, the primary reference teaches fibers of similar material, weight and lengths-page 3, lines 72-83; page 4, lines 70-79. Concerning claims 13 the secondary reference teaches polymeric marble microspheres of specific compositions, Example 11. The secondary reference does not exclude such microspheres be hollow and accordingly , it is submitted it would have been obvious to utilize same in the absence of unexpected results. It is further submitted that discovering the optimum or workable ranges where the general conditions of a claim are disclosed in the prior art, involves only routine skill in the art. In re Aller, 105 USPQ 233. Thus, the claimed marble microspheres compositions would have been obvious, in the absence of unexpected results. Concerning claim 15, the primary reference teaches

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similar densities in page 4, lines 95-105. Concerning claims 38-39, the UK patent teaches similar claimed article thickness in page 4, lines 75-79.

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Applicants who wish to send a facsimile (draft copies) for the examiner's immediate review can do so by using the Examiner's personal fax number at 571-273-1520. The faxing of all papers must conform with the notice published in the Official Gazette, 1096 O.G. 30 (November 15, 1989). **NOTE: All facsimiles sent to the examiner's personal fax number should be in draft-forms and will be treated as informal.**

Same facsimiles will not be entered in the related applications unless otherwise agreed and noted by the examiner.

The fax number for all other fascimile is 571-273-8300.

Information about **the status of an application** may be obtained from the Patent Information Retrieval system (**Private PAIR**).

Status inquires for **published applications** may be retrieved from either **Private PAIR** or **Public PAIR**. Questions about the PAIR system should be directed to the Electronic Business Center at **866-217-9197**.

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Any questions concerning the instant communication should be directed to Examiner Dixon, at 571-272-1520, Mondays, Wednesdays and Thursdays, between 12 noon and 8 PM, eastern time .

A handwritten signature in black ink, appearing to read 'Merrick Dixon', with a long horizontal flourish extending to the right.

Merrick Dixon

Primary Examiner

Group 1700